

LISTING OF CLAIMS

Claim 1 (previously presented) A stent for implanting in the body to hold open a blood vessel, comprising:

a. a body-compatible metal mesh defining a tube having adjacent contiguous cells, the cells having walls which are also the walls of adjacent cells, each of the plurality of cells including a pair of facing loops, each facing loop having a curved apex generally aligned along the longitudinal axis, and each facing loop having a first end and a second end that are generally aligned along the circumferential axis, each of the facing loops adapted to open further upon radial expansion of the stent which tends to foreshorten the stent longitudinally,

b. each of the plurality of cells further including a pair of curved flexible links which connect the adjacent ends of the pair of facing loops to complete each of the plurality of cells, the pair of curved flexible links made of a metal which, upon expansion of the stent, bend to substantially offset foreshortening along the longitudinal axis, and

c. said pair of facing loops and said curved flexible links disposed and adapted to cooperate so that the tube, when unexpanded, can flex as it is moved through curved blood vessels to a site where it is to be expanded and so that, when the stent is expanded in a curved vessel, at that site, as compared to each other, cells on the outside of the curve are open in length, but narrow in width as compared to cells on the inside of the curve which are short in length but increased in width.

Claim 42 (new) An expandable stent formed of a cylindrical unitary tube suitable for insertion into a lumen in which the stent may be expanded, comprising:

a plurality of continuous serpentine sections extending circumferentially around the stent;

a plurality of flexible connectors connecting said serpentine sections forming a generally uniformly sized cell structure wherein the length of each of said connectors is longer than the distance between adjacent serpentine sections each of said connectors being elongatable in a bend of the lumen so as to maintain a generally uniformly sized cell structure in the bend after expansion.

Claim 43 (new) The stent according to claim 42 wherein the flexible connectors are staggered between neighboring adjacent serpentine sections along the longitudinal length of the stent.

Claim 44 (new). The stent according to claim 42 wherein the flexible connectors are horizontally aligned between neighboring adjacent serpentine sections along the longitudinal length of the stent.

Claim 45 (new). The stent according to claim 44, wherein the flexible connectors further include straight portions and curved portions, the straight portions being connected to the neighboring adjacent sections.

Claim 46 (new). The stent according to claim 45, wherein the curved portions of the flexible connectors have an open end and a closed end, the open end of the connectors facing the same direction within each continuous serpentine section circumferentially around the stent, and alternate in the opposite direction along the longitudinal axis of the stent.

Claim 47 (new). The stent according to claim 44, wherein the flexible connectors are connected to peaks of neighboring adjacent serpentine sections.

Claim 48 (new). The stent according to claim 47, wherein the flexible connectors are attached to all the peaks of neighboring adjacent serpentine sections.

Claim 49 (new). A flexible connector for connecting loops of adjacent vertical meander patterns of a stent to form a generally uniformly sized cell structure, including: an elongatable member wherein the length of the member is greater than the distance between points of attachment of the member to the adjacent vertical meander patterns, said connector being elongatable so as to maintain a generally uniformly sized cell structure in a bend after expansion.

Claim 50 (new). The flexible connector of claim 49 wherein a plurality the connectors are staggered between neighboring adjacent vertical meander patterns along the longitudinal length of the stent.

Claim 51 (new). The flexible connector of claim 49 wherein a plurality the connectors are horizontally aligned between neighboring adjacent vertical meander patterns along the longitudinal length of the stent.

Claim 52 (new). A stent formed of a unitary tube having a patterned shape for insertion into a lumen in which it may be expanded, comprising:

- a. even first meander patterns having axes extending in a first direction;
- b. odd first meander patterns also having axes extending in said first direction, wherein said odd first meander patterns are 180° out of phase with said even first meander patterns and occur between every two even first meander patterns;
- c. second meander patterns having axes extending in a second direction, different than said first direction, wherein said second meander patterns

intersect with said even and odd first meander patterns to form a generally uniformly sized structure;

d. wherein said first and said second meander patterns comprise loops;

e. wherein at least one loop of each of said second meander patterns is between each odd and even first meander pattern;

f. said loops of said second meander patterns containing at least a portion having a smaller width, so as to allow the stent to maintain a generally uniformly sized structure in a curved lumen.

Claim 53 (new). The stent according to claim 52 wherein said second meander patterns are connected to said even and odd first meander patterns so as to leave loops of the first meander patterns between adjacent second meander patterns.

Claim 54 (new). The stent according to claim 52, wherein said second meander patterns have straight and curved portions.

Claim 55 (new). The stent according to claim 54, wherein each curved portion of said second meander patterns further includes an open end and a closed end, wherein the open end alternates in direction along the longitudinal axis of the stent.

Claim 56 (new). A stent formed of a unitary tube having a patterned shape for insertion into a lumen in which it may be expanded, comprising:

a. even first meander patterns having axes extending in a first direction;

b. odd first meander patterns also having axes extending in said first direction, wherein said odd first meander patterns are 180° out of phase with said even first meander patterns and occur between every two even first meander patterns;

c. second meander patterns having axes extending in a second direction, different than said first direction, wherein said second meander patterns intersect with said even and odd first meander patterns to form a generally uniformly sized structure;

d. wherein said first and said second meander patterns comprise loops;

e. wherein at least one loop of each of said second meander patterns is between each odd and even first meander pattern;

f. wherein at least some of said loops of said second meander patterns are more flexible than the loops of said first meander patterns, so that a distance between first meander patterns is maintained upon expansion.